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MEETING MINUTES

TO: Distribution **DATE:** March 15, 1995

FROM: Phil Nixon **DOC #:**SP307:031695:02

PROJECT: Solar Evaporation Ponds, OU4 IM/IRA

SUBJECT: Joint Working Group Weekly Meeting

ATTENDANCE:

Andy Ledford, EG&G
Scott Surovchak, DOE
Harlan Ainscough, CDPHE
Arturo Duran, EPA
Briand Wu, DOE
Eileen Jemison, EG&G
Phil Nixon, Parsons ES

DISTRIBUTION:

Steve Howard, SAIC/DOE
John Haasbeek, ERM
Steve Keith, EG&G
M. Matthews, EG&G, (2)
Jeff Ciocco, DOE
Briand Wu, DOE
Rick Wilkinson
Central Files (9.1.5.3)

1. Discussion/Ratification of Previous Meeting Minutes

Arturo Duran, Harlen Ainscough, Scott Surovchak, and Andy Ledford provided comments on the meeting minutes from the previous meeting. The minutes were ratified with the incorporation of the comments/modifications.

2. Feedback from the Brown & Root Technical Workshop

Harlen Ainscough reported that he had attended the meeting on March 13, 1995, and found the meeting to be very useful. Mr. Ainscough informed the group that he had indicated to the sludge/pondcrete treatment team that the primary CDPHE criteria was to remove the free liquids from the materials, and that rigorous treatment was not a CDPHE requirement.

Andy Ledford specified that the testing which Brown & Root was performing was to identify the appropriate design mix, to provide physical compaction results to support the design of the waste mixture (soils and pond wastes), and to provide leachability results that will be used to demonstrate that the consolidated materials are protective of human health and the environment.

Mr. Ledford continued that the VS2DT model will be used to assist with the design of the compacted consolidated materials. In addition, VS2DT will provide a means to verify the results of the previous VLEACH model. VS2DT is a more sophisticated model that requires detailed input data. Therefore, Brown & Root is under contract to perform leachability testing of the consolidated materials. These efforts will ensure the defensibility of pondcrete/sludge disposition beneath the engineered cover, since the majority of the plutonium contamination is contributed by the pond wastes.

Arturo Duran specified that the criteria for sludge/pondcrete treatment, and decisions relating to the process selection are a function of the OU4 IM/IRA and the working group. Arturo remarked that this group has had little involvement with sludge/pondcrete treatment issues to date and requested closer communication between the working team and the sludge/pondcrete processing team. Harlen Ainscough requested that the sludge/pondcrete processing team send representatives to the regular team meetings to provide periodic progress briefings. Dr. Wu committed that there would be a sludge/pondcrete briefing within the next 2 team meetings.

Harlen Ainscough and Arturo Duran agreed that the IM/IRA-EA Decision Document, would not be expected to contain all the sludge/pondcrete treatment process details. However, the agencies expect to review the Title II design package for approval.

3. Permitting Issues

Harlen Ainscough reported that he had been assigned the responsibility for authoring the draft permit. Andy Ledford offered to provide Mr. Ainscough with copies of existing permits and general site information for use in drafting the document. Harlen Ainscough accepted Mr. Ledford's offer.

Harlen Ainscough indicated that members of CPDHE are still uncertain if it is legal to designate a temporary unit (TU) within a permitted unit. Harlen requested that the DOE take a second look in the Corrective Action Management Unit (CAMU) regulation to see if there is any reason why a TU could not be designated within a permitted unit. Andy Ledford distributed a copy of the most recent project schedule to the EPA and CDPHE.

4) Building 964 Update

Harlen Ainscough reported that Dr. Dowsett and Mr. Baughman of the CPDHE agree that the modification of the Building 964 Closure Plan can be implemented as a Class I permit modification.

Andy Ledford reported that the drummed wastes currently stored in Building 964 will likely be relocated in the new Central Waste Storage Facility. Mr. Ledford also specified that the target date to have the wastes relocated and the building shell removed was September 30, 1995.

5) March 22, 1995 Public Meeting

Eileen Jemison reported that the Public Meeting on March 22, 1995 would be held at the Arvada Performing Arts Center. The meeting will begin at 6:30 pm and is scheduled to end at 8:30 pm. The OU4 portion of the meeting will commence at about 7:30 pm in that there are two other items on the meeting agenda.

It was agreed that the meeting would be both an interactive question and answer period and a formal hearing for the recording of comments. The meeting agenda will be as follows:

1) Completion of the second meeting topic
2) Announcement of a 15-minute break to show the videotape or talk to OU4 technical representatives
3) Break/Videotape
4) Interactive question and answer period
5) Formal recording of Public Comments

6) Subsurface Drain Presentation

Parsons Engineering Science presented a status of the design of the subsurface drain and how it interfaces with the engineered cover. Dan Creek stated that the subsurface drain was a fairly simple system designed to prevent potentially rising ground water from contacting the consolidated contaminated materials.

The design criteria include:

1) Minimization of water flowing to the ITS,
2) Utilization of natural materials with long-term durability,
3) Minimize the cut and fill required to establish the required slope,
4) Slope the system so that the horizontal flow gradient exceeds the ground water vertical rise potential.

Mr. Creek presented the layer of the subsurface drain. The drain is 3 feet thick and consists of (top to bottom):

Filter layer #1
Filter layer #2
Drain layer
Filter layer #2
Filter layer #1

The two different types of filter materials are required based on filtration calculations which indicate that a gradation of particle sizes is required. The layers are thicker than necessary, but the thickness was driven by what can be readily constructed in the field. Each of these layers

is 6 inches thick. The drain layer is 1 foot thick as calculated to provide an adequate flow channel. Mr. Creek stated that filter fabrics will be used to ensure that these layers will remain segregated during construction. No credit has been taken for these filter fabrics to enhance the functioning of the subsurface drain.

Mr. Creek showed the slope of the subsurface drain and the drainage patterns designed so that water would flow to the ITS.

Sandy Stenseng presented how the toe of the engineered cover interfaces with the subsurface drain. Key points from the detailed drawings indicate that the subsurface drain is completely covered by the engineered cover, and that there is no way for rising ground water to migrate into the consolidated waste materials by horizontal migration along the edges.

7) Future Meetings

It was agreed that future team meetings would occur on Wednesdays at 8:00 am at the Parsons Engineering Science office. The next meeting is tentatively scheduled for March 22, 1995.

Philip A. Nixon

OU4 Solar Evaporation Ponds
Project Manager